

Date: Sun, 13 Feb 94 07:01:50 PST  
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>  
Errors-To: Info-Hams-Errors@UCSD.Edu  
Reply-To: Info-Hams@UCSD.Edu  
Precedence: Bulk  
Subject: Info-Hams Digest V94 #145  
To: Info-Hams

Info-Hams Digest                      Sun, 13 Feb 94                      Volume 94 : Issue    145

Today's Topics:

        A is for alpha..... (2 msgs)  
        Antenna Erection Aids - Thor's socks  
        Copying High-Speed CW: Print or Script?  
Daily Summary of Solar Geophysical Activity for 07 February  
Daily Summary of Solar Geophysical Activity for 08 February  
        Hamblaster update  
        Long range digital links  
        NUDE AMATEUR RADIO CL  
        which is better qrp band--30 or 40?

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: 11 Feb 1994 14:34:28 GMT  
From: ucsnews!sol.ctr.columbia.edu!howland.reston.ans.net!agate!news.Brown.EDU!  
NewsWatcher!user@network.ucsd.edu  
Subject: A is for alpha.....  
To: info-hams@ucsd.edu

In article <erik\_read-100294175751@gardner2.life.uiuc.edu>,  
erik\_read@qms1.life.uiuc.edu (erik read) wrote:

> I have a friend who speaks english badly and does not choose words to  
> describe the letters. I think the military has a thing where they use  
> standardized, easily recognisable words, like alpha, bravo, charlie,  
> etc.....  
> I myself do not know them all and I really think that this would help a

> lot.  
> Can anyone help me? Is this the right place to be posting?  
>  
> Thanks in advance; Erik

Alpha  
Bravo  
Charlie  
Delta  
Echo  
Foxtrot  
Golf  
Hotel  
India  
Juliette  
Kilo  
Lima  
Mike  
November  
Oscar  
Papa  
Quebec  
Romeo  
Sierra  
Tango  
Uniform  
Victor  
Whiskey  
X-Ray  
Yankee

So I'm Kilo Delta One November Romeo

--  
== Anthony\_Pelliccio@Brown.edu (Tony Pelliccio, KD1NR)  
== Brown University Alumni & Development Computing Services  
== Box 1908, Providence, RI 02912 Tel. (401) 863-1880  
== I speak for myself, and not for Brown University. Remember that!

-----  
Date: 11 Feb 1994 00:00:42 GMT  
From: mvb.saic.com!unogate!news.service.uci.edu!usc!howland.reston.ans.net!  
vixen.cso.uiuc.edu!gardner2.life.uiuc.edu!user@network.ucsd.edu  
Subject: A is for alpha.....  
To: info-hams@ucsd.edu

I have a friend who speaks english badly and does not choose words to describe the letters. I think the military has a thing where they use standardized, easily recognisable words, like alpha, bravo, charlie, etc.....

I myself do not know them all and I really think that this would help a lot.

Can anyone help me? Is this the right place to be posting?

Thanks in advance; Erik

-----  
Date: Thu, 10 Feb 1994 17:53:39 GMT  
From: netcomsv!netcom.com!greg@decwrl.dec.com  
Subject: Antenna Erection Aids - Thor's socks  
To: info-hams@ucsd.edu

In article <9402091910.AA23952@rodgers.rain.com> lbrunson@rodgers.rain.COM writes:  
>certain applications. I use an old sock.

'In days of old, when hams were bold  
and sling-shots weren't perfected  
they'd put some rocks into a sock  
thus skyhooks were erected'

Greg

-----  
Date: Fri, 11 Feb 1994 20:52:50 GMT  
From: netcon!bongo!netcomsv!netcom.com!slay@locus.ucla.edu  
Subject: Copying High-Speed CW: Print or Script?  
To: info-hams@ucsd.edu

: A mailing I read is involved in a comparision of the speeds of  
: printing and cursive writing. I decided to consult some experts.  
: So, all you high-speed CW ops, which do \_you\_ use?

Cursive is definitely faster than printing. Using a keyboard is much faster still. The best is to copy in your head. For me, I'll use pencil and paper up til around 25 wpm; more likely a keyboard which is comfortable (for me) up til around 35-40 wpm. If you use a keyboard, at higher speeds you generally have to read the text of what you typed to know what you copied - it (the code) passes directly from your ears to you fingertips and doesn't stop off in the brain. ;-) For anything >40 wpm, I personally have to copy in my head and make notes, where possible, on paper.  
Cheers de Sandy WA6BXH/7J1ABV slay@netcom.com



region produced several B-class events.

Solar activity forecast: solar activity should become low with Region 7664 beginning to produce small C-class bursts. If the current pace of growth continues, small M-class flares could be observed in a few days from this region.

STD: Electrons at greater than 2 MeV have become elevated. The enhancement began at about mid-day on the 7th. The enhancement appears to be approximately similar in intensity to what was observed at this time during the last solar rotation. If flux levels continue to remain strongly enhanced over the next week as occurred last rotation, geosynchronous satellite anomalies may be observed.

Geomagnetic storm conditions continued. Mid latitudes experienced minor to major storm levels. High latitude conditions ranged between active and severe storm levels. The Forbush decrease noted yesterday returned to a near normal level.

Geophysical activity forecast: the geomagnetic field should become predominantly active for the next three days. Isolated periods at minor to major storm are forecast for mid latitudes and isolated major to severe storm periods are possible for high latitudes.

#### Event probabilities 08 feb-10 feb

Class M	05/05/05
Class X	01/01/01
Proton	01/01/01
PCAF	Green

#### Geomagnetic activity probabilities 08 feb-10 feb

A. Middle Latitudes	
Active	35/35/35
Minor Storm	35/35/35
Major-Severe Storm	20/20/20
B. High Latitudes	
Active	30/30/30
Minor Storm	40/40/40
Major-Severe Storm	20/20/20

HF propagation conditions were significantly below normal over almost all regions today. Strong geomagnetic and auroral storming produced radio blackout conditions for transpolar and

transauroral circuits. Absorption was widespread and relatively strong today. The storming raised LUFs and lowered MUFs. MUFs were decreased by between 30 and 50 percent over most regions. Fair to poor propagation was observed over even the low latitudes. Middle latitudes saw fair to very poor propagation. Storming is still in progress at the present time, although it is expected to subside slightly, later on 08 February. A return to near-normal conditions is not expected for several days yet, except over the lower latitudes where near-normal conditions may return on 09 February. Higher latitudes will require additional time to recover from this ionospheric storm.

# COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS

## REGIONS WIT

NMBR	LOCATION	LO	AREA	Z	LL	NN	MAG	TYPE
7664	S11W28	014	0130	DAO	09	020	BET	
7665	N04W24	010	0020	HSX	02	002	ALPHA	
7666	N18W08	354	0090	CSO	08	005	BET	
7667	S08W04	350	0020	BXO	05	005	BET	

## REGIONS DUE TO RET

NMBR	LAT
7657	N10 234
7652	N04 221

## LISTING OF SOLAR ENERGETIC EVENTS FOR 07 FEBRUARY, 1994

BEGIN	MAX	END	RGN	LOC	XRAY	OP	245MHZ	10CM	SWEEP
NONE									

## POSSIBLE CORONAL MASS EJECTION EVENTS FOR 07 FEBRUARY, 1994

BEGIN	MAX	END	LOCATION	TYPE	SIZE	DUR	II	IV
NO EVENTS OBSERVED								

## INFERRED CORONAL HOLES. LOCATIONS VALID AT 07/2400Z

ISOLATED HOLES AND POLAR EXT								
EAST	SOUTH	WEST	NORTH	CAR	TYPE	POL	AREA	OBSN
NO DAT								

# SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date	Begin	Max	End	Xray	Op	Region	Locn	2695 MHz	8800 MHz	15.4 GHz
06 Feb:	0742	0747	0755		SF	7664	S10W24			
	0812	0816	0820	B5.0	SF	7664	S10W25			
	1252	1313	1328	B7.9	SF	7664	S13W30			
	1650	1654	1659	B1.6						

# REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

	C	M	X	S	1	2	3	4	Total	(%)
Region 7664:	0	0	0	3	0	0	0	0	003	(75.0)
Uncorrelated:	0	0	0	0	0	0	0	0	001	(25.0)

Total Events: 004 optical and x-ray.

# EVENTS WIT

Date	Begin	Max	End	Xray	Op	Region	Locn	Sweeps/Optical Observations
NO EVENTS OBSERVED.								

# NOTES:

All times are in Universal Time (UT). Characters preceding begin, max, and end times are defined as: B = Before, U = Uncertain, A = After. All times associated with x-ray flares (ex. flares which produce associated x-ray bursts) refer to the begin, max, and end times of the x-rays. Flares which are not associated with x-ray signatures use the optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II	= Type II Sweep Frequency Event
III	= Type III Sweep
IV	= Type IV Sweep
V	= Type V Sweep
Continuum	= Continuum Radio Event
Loop	= Loop Prominence System,
Spray	= Limb Spray,
Surge	= Bright Limb Surge,

EPL            = Eruptive Prominence on the Limb.

\*\* End of Daily Report \*\*

-----  
Date: Thu, 10 Feb 1994 03:04:36 MST  
From: mvb.saic.com!unogate!news.service.uci.edu!usc!howland.reston.ans.net!  
math.ohio-state.edu!cyber2.cyberstore.ca!nntp.cs.ubc.ca!alberta!ve6mgs!  
usenet@network.ucsd.edu  
Subject: Daily Summary of Solar Geophysical Activity for 08 February  
To: info-hams@ucsd.edu

\/

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACT

08 FEBRUARY, 1994

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(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACT

-----  
!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 039, 02/08/94  
10.7 FLUX=095    90-AVG=106            SSN=085            BKI=6555 6445    BAI=050  
BGND-XRAY=B1.2    FLU1=5.1E+06    FLU10=2.3E+04    PKI=6566 6455    PAI=056  
  BOU-DEV=151,086,106,083,130,059,055,073    DEV-AVG=092 NT    SWF=00:000  
  XRAY-MAX= B7.3    @ 1614UT    XRAY-MIN= A7.5    @ 0206UT    XRAY-AVG= B1.8  
NEUTN-MAX= +002%    @ 1325UT    NEUTN-MIN= -003%    @ 1105UT    NEUTN-AVG= -0.5%  
  PCA-MAX= +0.1DB @ 1800UT    PCA-MIN= -0.2DB @ 1040UT    PCA-AVG= -0.0DB  
BOUTF-MAX=55355NT @ 2359UT    BOUTF-MIN=55306NT @ 1718UT    BOUTF-AVG=55330NT  
GOES7-MAX=P:+000NT@ 0000UT    GOES7-MIN=N:+000NT@ 0000UT    G7-AVG=+058,+000,+000  
GOES6-MAX=P:+122NT@ 1521UT    GOES6-MIN=N:-099NT@ 0704UT    G6-AVG=+084,+041,-037  
  FLUXFCST=STD:097,098,100;SESC:097,098,100    BAI/PAI-FCST=025,020,020/035,025,025  
  KFCST=4455 6423 4345 4433    27DAY-AP=020,021    27DAY-KP=4434 4433 4433 5334  
  WARNINGS=\*GSTRM;\*AURMIDWCH  
  ALERTS=\*\*MAJSTRM  
!!END-DATA!!

NOTE: The Effective Sunspot Number for 07 FEB 94 was 25.0.  
The Full Kp Indices for 07 FEB 94 are: 4o 6- 4+ 7- 6o 5o 5- 3o  
The 3-Hr Ap Indices for 07 FEB 94 are: 30 65 35 109 86 51 42 16



## SYNOPSIS OF ACT

Solar activity remained very low. New Region 7668 (N09E50) emerged rapidly and produced several optical flares with B-class enhancements. Region 7664 (S14W62), which was growing rapidly on 07 Feb, stabilized during the period. A lack of data is inhibiting analysis.

Solar activity forecast: solar activity should become generally low. Region 7668 is becoming a likely candidate for low C-class subflares. Old Region 7654 is due at the east limb at the end of the period and should start to elevate activity levels at that time. Last rotation, Region 7654 produced four M-class and many C-class events.

The geomagnetic field was at active to major storm levels. Some high latitude sites experienced severe storm conditions. The severity of this disturbance appeared to be moderating toward the end of the period. More frequent active to unsettled k indices were observed at various observatories.

Geophysical activity forecast: the geomagnetic field should become predominantly active for the duration of the forecast period. Occasional minor to major storm periods are likely. The coronal hole responsible for this disturbance is quite elongated and disturbed geomagnetic conditions should be expected for approximately one week.

### Event probabilities 09 feb-11 feb

Class M	01/01/01
Class X	01/01/01
Proton	01/01/01
PCAF	Green

### Geomagnetic activity probabilities 09 feb-11 feb

#### A. Middle Latitudes

Active	35/35/35
Minor Storm	35/35/35
Major-Severe Storm	10/10/10

#### B. High Latitudes

Active	35/35/35
Minor Storm	35/35/35
Major-Severe Storm	15/15/15

HF propagation conditions were disturbed over most regions today. A moderate ionospheric storm is in progress. MUFs are depressed and LUFs are raised, decreasing the available bandwidth and resulting in more difficult communications, particularly for transpolar and transauroral circuits where propagation has been useless for a good part of the UTC day. Conditions are expected to remain disturbed over the next 24 to 48 hours before very gradually improving. Conditions are not expected to return to near-normal for at least several days, perhaps extending beyond 5 to 7 days.

# COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS

## LISTING OF SOLAR ENERGETIC EVENTS FOR 08 FEBRUARY, 1994

BEGIN	MAX	END	RGN	LOC	XRAY	OP	245MHZ	10CM	SWEEP
1044	1044	1045							160

## POSSIBLE CORONAL MASS EJECTION EVENTS FOR 08 FEBRUARY, 1994

BEGIN	MAX	END	LOCATION	TYPE	SIZE	DUR	II	IV
NO EVENTS OBSERVED								

## INFERRED CORONAL HOLES. LOCATIONS VALID AT 08/2400Z

ISOLATED HOLES AND POLAR EXT									
EAST	SOUTH	WEST	NORTH	CAR	TYPE	POL	AREA	OBSN	
NO DAT									

## SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date	Begin	Max	End	Xray	Op	Region	Locn	2695 MHz	8800 MHz	15.4 GHz
07 Feb:	0217	0225	0231	B4.3						
	0449	0454	0459	B6.4	SF	7664	S12W39			
	0854	0858	0905	B2.4						
	1251	1257	1259	B3.9						
	1357	1414	1432	B8.2	SF	7664	S12W42			
	1404	1414	1427	B8.6						

# REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

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	C	M	X	S	1	2	3	4	Total	(%)
	--	--	--	--	--	--	--	--	---	-----
Region 7664:	0	0	0	2	0	0	0	0	002	(33.3)
Uncorrelated:	0	0	0	0	0	0	0	0	004	(66.7)

Total Events: 006 optical and x-ray.

## EVENTS WIT

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Date	Begin	Max	End	Xray	Op	Region	Locn	Sweeps/Optical	Observations
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
NO EVENTS OBSERVED.									

## NOTES:

All times are in Universal Time (UT). Characters preceding begin, max, and end times are defined as: B = Before, U = Uncertain, A = After. All times associated with x-ray flares (ex. flares which produce associated x-ray bursts) refer to the begin, max, and end times of the x-rays. Flares which are not associated with x-ray signatures use the optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II	= Type II Sweep Frequency Event
III	= Type III Sweep
IV	= Type IV Sweep
V	= Type V Sweep
Continuum	= Continuum Radio Event
Loop	= Loop Prominence System,
Spray	= Limb Spray,
Surge	= Bright Limb Surge,
EPL	= Eruptive Prominence on the Limb.

\*\* End of Daily Report \*\*

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Date: Fri, 11 Feb 1994 14:04:42 GMT  
 From: sgiblab!twg.com!eco.twg.com!psinntp!laidbak!tellab5!jwa@ames.arpa  
 Subject: Hamblaster update  
 To: info-hams@ucsd.edu

## The Hamblaster Update

Over the past several months I posted updates about a DSP "The Hamblaster" that Will Torgrim (N9PEA) and myself are developing.

We are focusing our efforts on a packet modem that allows the user to improve H.F. reception by interfacing the Hamblaster (a PC compatible DSP sound board) to a transceiver and a packet or all mode TNC. Modems/filters for RTTY, Packtor, Amtor are also under development and are compatible with the same control panel software.

Here are the latest developments  
2-10-94

Several weeks ago I mentioned that the projected cost for the board would be about \$350.00. It was just a "guessestimate". It looks like it will be more in the \$275.00 range and could be as low as \$250.00. This may still sound high compared to the Soundblaster or other sound cards, but you have to remember that it's made exclusively for Ham Radio and it won't have the volume (sales) of other sound cards. I would also like to point out that it's not just software. It's a sound card with a DSP and a digital port that can interface to a TNC. The DSP is used as an improved filter for Packet or RTTY and other digital modes. It unless there's a way to interface it with Baycom, it cannot copy packet without a TNC.

### 1) External Power supply

I think one feature that separates the Hamblaster from other sound boards is it's ability to run on an external 12 volt supply. When a filter or modem is loaded, You can turn off the computer and Hamblaster keeps on going and going and going!

When it's connected to a PK-232, there's no need to keep the computer on in order to keep the DSP alive. Right now, my PK232/Hamblaster is running and it's been operating for about 5 days

### 2) Adaptive (LMS) filter

There's ongoing development in this area. We are

planing (I don't think this has been done before)  
to add controls to the LMS algorithm.

### 3) Soundblaster compatibility

The Hamblaster IS NOT soundblaster compatible.  
It was designed that way so that it will run  
independant of other sound boards. I can still  
use my Soundblater to record sound, play music,  
load software from the CD or use the midi interface.  
At the same time, I can receive packets or use  
a DSP filter with my Ham equipment.

---

Jack Albert	Fellow Radio Hacker
Tele (708) 378-6201	
Tellabs Operations, Inc.	FAX (708) 378-4590
1000 Remington Blvd.	jwa@tellabs.com
Bolingbrook, IL 60440	

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      * *
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THE BOWTIE FILTER

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Date: 11 Feb 94 18:55:16 GMT  
From: yale.edu!noc.near.net!news.delphi.com!BIX.com!hamilton@yale.arpa  
Subject: Long range digital links  
To: info-hams@ucsd.edu

br@cs.cmu.edu (Bill Ross) writes:

- > Can any of you radio folks give me a hand with this?
- > I need a system capable of transmitting about 1 MegaBit per second
- > of digital data from anywhere on the planet. This would be a one-way
- > link. I'm sure this can be done, but can it be done reliably without
- > a satelllite and lots of very fancy gear? If so, I have some questions:
- > How much might the equipment to do this cost?
- > How much would this equipment (the transmitter) weigh?
- > How much volume would this equipment (transmitter) occupy?

> How much power would the transmitter require during operation?  
>       How big would the antenna have to be?

> If the problem is simplified to communicate within a single hemisphere,  
> does that make life alot easier?

> Any information would be a great help!  
> Thanks very much!  
> Bill

I think you'd have a better chance of doing this if your last name was Gates, not Ross. Does that help you guess what sort of cost we're talking about?

Seriously, there's no way to do this except with a satellite or a land line (probably a fiber) and lots of very fancy, very expensive gear. There's no way at all to do this with radio. HF can often propogate to anywhere on the planet via skywave (bouncing off the ionosphere) but not reliably and there's no way anyone's going to give you the spectrum you need to move 1Mbit/sec that way (we're talking international treaty kind of limitations!) There's enough spectrum if you can use UHF or higher frequencies, but these are line-of-sight only, which is why you need a satellite.

I suggest it's time to reconsider whether this is really something you "need". :-)

Regards,  
Doug Hamilton     hamilton@bix.com     Ph 508-358-5715  
Hamilton Laboratories, 13 Old Farm Road, Wayland, MA 01778-3117

-----  
Date: Fri, 11 Feb 94 10:14:56 -0800  
From: netcon!bongo!netcomsv!lavc!steven.rosenberg@locus.ucla.edu  
Subject: NUDE AMATEUR RADIO CL  
To: info-hams@ucsd.edu

>Gary Davis (gdavis@griffin.uvm.edu) wrote:  
>: I heard a strange story on the CBC last evening. The report was on  
>: the increasing interest in nudism in the Winter months. To promote  
>: this festive and relaxing activity additional interests where specified.  
>  
>: There is, according to the CBC, a nudist amateur radio club.  
>  
>Is this like 'operating barefoot'? Where to they clip the HT's external  
>speaker-mike?   ;->  
>

>k4adl  
>

I guess these folks have extensive experience with EME -- what's a little moonbounce between friends?

KC6FYL

-----  
Date: Tue, 8 Feb 1994 20:09:53 GMT  
From: netcomsv!netcom.com!slay@decwrl.dec.com  
Subject: which is better qrp band--30 or 40?  
To: info-hams@ucsd.edu

mtrail@violet.berkeley.edu wrote:  
: The title says it all. Which band do you qrp'ers  
: prefer?

For questions on QRP - I suggest a good source of info is the QRP reflector.  
To subscribe to the mailing list, simply send an e-mail msg to:

qrp-request@think.com

I can't recall if you should only enter SUBSCRIBE or also include info  
on yourself (e.g. name, call, qrp rig, etc).  
Cheers de Sandy WA6BXH/7J1ABV

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Date: 11 Feb 1994 00:07:43 GMT  
From: mvb.saic.com!unogate!news.service.uci.edu!usc!howland.reston.ans.net!  
news.intercon.com!udel!news.sprintlink.net!news.clark.net!andy@network.ucsd.edu  
To: info-hams@ucsd.edu

References <gdavis.760825204@griffin>, <2jd6kj\$mqtc@clarknet.clark.net>,  
<mosier.83.0@fagan.uncg.edu>ews.int  
Subject : Re: Nude amateur radio clubs

Stephen Mosier (mosier@fagan.uncg.edu) wrote:  
: In article <2jd6kj\$mqtc@clarknet.clark.net> andy@clark.net  
: (Andrew M. Cohn) writes:

: >: There is, according to the CBC, a nudist amateur radio club.  
: >  
: >Is this like 'operating barefoot'? Where to they clip the HT's external  
: >speaker-mike? ;->

: Where do they hang the HT??

: steve

: mosier@fagan.uncg.edu

That should be obvious. ;-> -andy

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End of Info-Hams Digest V94 #145

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